



North of the Delta  
Offstream Storage Investigation

# **Progress Report**

## **Appendix O: Phase 1 Fault and Seismic Hazards Investigation**

July 2000

Integrated  
Storage  
Investigations

CALFED  
BAY-DELTA  
PROGRAM

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## **Appendix O: Phase 1 Fault and Seismic Hazards Investigation**

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## **Summary**

This report presents the results of the Phase I Fault and Seismic Hazards Investigation of the proposed Red Bank, Thomes-Newville, Sites, and Colusa Project reservoir areas. The purpose of this report is to compile and summarize the information available to date regarding fault and seismic hazards along the west side of the Sacramento Valley. The scope includes a review of previous work, a compilation of damsite and fault mapping previously completed by the Department of Water Resources and other agencies, and an estimation of preliminary seismic and ground breakage risks from known faults.

This is the first in a series of reports discussing faulting and seismicity for the offstream storage project alternatives being investigated by DWR. It is to be used for regional planning studies. Information was obtained from published documents; no fieldwork was performed. The report describes regional geology, faulting, and geologic structures and includes a brief geologic description of project damsites and a regional earthquake history. Also included are preliminary estimates of risks associated with the maximum credible earthquake, reservoir induced seismicity, random earthquakes, liquefaction, landscaping, and surface rupture hazards.

Phase II will be published at a later date and will include the results of field investigations in progress, aerial photography and radar analyses, drilling and trenching of faults and lineaments, detailed geologic mapping, consultant reports, and final seismic and fault hazard evaluations of the proposed alternative projects. The Phase II report will contain information suitable for final design activities.

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